

Certificate Focuses on Health Outcomes Research

If you are interested in solving problems in community health, health services, or health policy, consider the Certificate in Implementation Science and Community Health Outcomes. Implementation science and community health outcomes research support methods that promote the systematic uptake of research findings and translation of what has been learned in controlled settings into real world clinical practice.



"I have developed skills in engaging in multidisciplinary collaborations along with appropriate techniques to manage a multidisciplinary research team, and successful approaches to community engagement. These skills are essential in being an effective future researcher."

Maichou Lor PhD
UW-Madison School of Nursing

Awarded the certificate in 2014



"I learned the importance of involving end-users right from the start of the research project. Their involvement enhances the entire research experience from ensuring that the research question/ topic is pertinent, increasing the participation in the project, and ensuring the success of translating your research findings into clinical practice."

Jennifer Weiss, MD, MS
UW-Madison Department of Medicine, Division of Gastroenterology and Hepatology

Awarded the certificate in 2014



"I could quantify the healthcare gaps facial racial minority and rural patients, but I didn't understand why those gaps existed. I used the skills I learned through the certificate program to get a better idea of how to answer these questions by engaging folks who were out in the field."

Meghan Brennan, MD, MS
UW-Madison Department of Medicine

Awarded the certificate in 2019



"Researchers can fall into a trap of thinking that they know what the right question is and thinking the community will want to know the same thing. If you don't do community engaged work, you run into the risk of asking the wrong question. If you want to do work that's useful for the community and for practitioners, you need to make sure that your question is THEIR question."

Marissa Abbott, PhD, MPH
U.S. Department of Health and Human Services

Awarded the certificate in 2020



Institute for Clinical and Translational Research

UNIVERSITY OF WISCONSIN
SCHOOL OF MEDICINE AND PUBLIC HEALTH

The Certificate in Implementation Science and Community Health Outcomes was designed to accommodate the education and training needs of students and researchers from a variety of disciplines. A certificate objective is to promote innovative approaches to solving community health problems by encouraging collaborations between faculty and students of diverse backgrounds, and by providing course options from a wide range of disciplines. Certificate students have come from business, education, engineering, kinesiology, medicine, nursing, pharmacy, physiology, population health, and social work.

► **Total Credit Hours**..... **11-13**

CORE/INTRO COURSE

► **POP HLTH 709 - Translational and Outcomes Research in Health and Health Care**..... **3**

POP HLTH 709 will introduce you to translational research methods, issues, and competencies, including effectiveness, dissemination, implementation, and policy research. Professor Andrew Quanbeck will take you through the steps of designing a sound and competitive project - from developing the research question to reporting the findings.

This course focuses on health issues and settings and is very appropriate for students whose research interests fall into those contexts and/or are seeking to engage with community partners in conducting their research studies. This is a very practical class with weekly activities that will enhance students’ research toolkits.

Multidisciplinary. Students from previous semesters represent a diversity of professional backgrounds – biomedical engineering, counseling psychology, education, medicine, nursing, occupational therapy, pharmacy, physical therapy, population and public health and the social sciences. Pairings for group projects are strategically formulated to advance multidisciplinary thought processes.

“POP HLTH 709 was a foundational course for community work.”
-Kate Scheuer, Awarded the certificate in 2018

“The course connected me to other students who were doing interesting work and I learned a lot from listening to their presentations. It was a very valuable course.”
-Marissa Abbott, PhD, MPH, Awarded the certificate in 2020



Andrew Quanbeck, PhD, is an associate professor in the University of Wisconsin’s Department of Family Medicine and Community Health and an honorary associate of the University of Wisconsin’s Department of Industrial & Systems Engineering. Dr. Quanbeck’s research draws upon concepts from systems engineering in developing innovative approaches to the implementation of evidence-based practices in healthcare. Specifically, his research focuses on the prevention and treatment of substance use disorders in primary care settings

ELECTIVES: Select from lists of approved courses*, or propose courses that meet criteria

Your certificate adviser can help you choose courses that will cover the methods for finding answers to your research questions. In addition, you can propose to your certificate adviser a pertinent graduate-level course for consideration as elective credit, including a course that also fulfills a requirement for your degree program and/or a course that you have already taken.

► **Working with Communities and Implementation Science**..... **2-3**

Select a course that addresses understanding communities and organizations in which research occurs, how to work with communities and organizations, and the various ways “community” can be conceptualized and why that matters.

► **Qualitative Methods Relevant to Translational and Outcomes Research**..... **3**

Select a qualitative course relevant to research in communities or organizations.

► Seminar 1-2 credits

Choose between four seminars:

1. **Best Practices in Community-Engaged Scholarship, (COUN PSY 601)**, offered through the Department of Counseling Psychology, School of Education.
2. **Dissemination Research and Implementation Science Seminar (DRISS), (NURSING 699)**, offered through the Department of Medicine and the Dissemination and Implementation Launchpad.
3. **Contemporary Practices in Nursing – Patient & Family Engagement in Research, (NURSING 590)**, offered through the School of Nursing.
4. **Attend presentations or view videos related to community engaged research, translational research, D & I research on and off campus.**



"One of the biggest things I learned was to be more open and to give more weight to different methodologies. All my training was in quantitative methods. I wouldn't have taken courses on qualitative research if it hadn't been for the certificate."

-Kate Scheuer

UW-Madison Cell. & Mol. Biol. Program
Awarded the certificate in 2018



"Be open-minded. Think about all the ways the program enhances your experience instead of adding additional requirements. Every minor or certificate you do will add additional requirements; reframe it to think about the valuable information you will learn and all the people you will connect with. Everyone doing the certificate with me was working on really interesting projects, on topics that I hadn't even thought about. Being able to be in that space, to share and collaborate, to see how people actually engaged community providers, was so helpful!"

-Marissa Abbott, PhD, MPH

U.S. Department of Health and Human Services,
Awarded the certificate in 2020

PROJECT

► Project 2

The purpose of the project is to apply and demonstrate your understanding of implementation science and community health outcomes research principles and methods. Your project will serve as a measure of what you have learned in the certificate program. Demonstrate an understanding of collaboration skills for developing sustainable partnerships, e.g., benefits of project to the community partner(s); or evidence of partner input to project design. Students will learn to employ data gathering and analysis methods that respect community partners' organizational culture, values, staffing, and workflow.



"The certificate helped me transition from doing quantitative research to doing quantitative AND qualitative research. While I was pursuing the certificate, I wrote an AHRQ K grant that was rated very successfully; I think part of that success was that I had identified a gap in my training and was pursuing the certificate to address it."

-Meghan Brennan, MD, MS

UW-Madison School of Medicine and Public Health
Awarded the certificate in 2019



"Think about your research project early, then use the certificate classes to develop the project, to develop relationships, and to apply what you learn as the project develops."

-Tana Chongsawat, MD, MPH

UW-Madison School of Medicine and Public Health
Department of Family Medicine and Community Health
Awarded the certificate in 2022

University of Wisconsin–Madison Faculty Advisers

Faculty advisers with extensive research experience work with certificate students to design a program to meet their specific training needs. An objective is to match each student with an adviser from outside his/her discipline in order to expose students to a variety of perspectives. Certificate advisers have said that this benefits them in the same way!

Betty Chewning, PhD – Professor, School of Pharmacy

Beth Fields, PhD, OTR/L, BCG – Assistant Professor, School of Education, Department of Kinesiology

Barbara King, PhD, RN, APRN-BC, FAAN – Professor, Charlotte Jane and Ralph A. Rodefer Chair, School of Nursing; Director of the Center for Aging Research & Education (CARE)

Elise Arsenault Knudsen, PhD, RN – Assistant Professor, School of Nursing

Marlon Mundt, PhD – Health Economist, Professor, Department of Family Medicine and Community Health

Susan Passmore, PhD – Assistant Professor, School of Nursing

Kristen Pecanac, PhD, RN – Associate Professor, School of Nursing

Kristen Pickett, PhD – Associate Professor, Occupational Therapy Program, Department of Kinesiology

Maria Mora Pinzon, MD, MS – Assistant Professor, Geriatrics and Gerontology, Department of Medicine

Julie Poehlmann, PhD, MS – Professor, School of Human Ecology

Edward C. Portillo, PharmD – Associate Professor, Pharmacy Practice & Translational Research Division, School of Pharmacy

Andrew Quanbeck, PhD – Associate Professor, Department of Family Medicine and Community Health

Jennifer Weiss, MD, MS – Associate Professor, Division of Gastroenterology and Hepatology, Department of Medicine

Douglas Wiegmann, PhD – Professor, Department of Industrial and Systems Engineering

Finding Training Grant Opportunities

Training grants often cover such expenses as tuition and fees, travel and conference registrations. For information about training grant opportunities, visit the sites listed below. Colleagues and research administrators in your department are also great resources!

- **UW ICTR Career Development Award Programs**
ictr.wisc.edu/education-training/career-development-programs/
- **Centennial Scholars Program (for UW SMPH faculty)**
tinyurl.com/y7uftc6o
- **UW-Madison Office of Postdoctoral Studies**
postdoc.wisc.edu
- **Funding Information for New and Current Graduate Students**
grad.wisc.edu/funding
- **NIH Research Training and Career Development Programs**
researchtraining.nih.gov/programs

Tuition

For graduate and professional students, tuition for certificate courses is the same rate as the student's primary degree program. For Capstone students, tuition is the same rate as the "Health Professional" program rate, which is posted at <https://bursar.wisc.edu/tuition-and-fees>. (To view the applicable tuition information, select the term/semester you intend to enroll and, under "choose a student program," select "Health Professional" in the drop down box.) The certificate program is 11-to-13 total credit hours. Most of our students enroll in an average of one three-hour course per semester. Previously completed course work, if approved, can be retroactively applied to fulfill certificate requirements.

For complete details about the certificate visit <https://ictr.wisc.edu> and/or contact: Deidre Vincevineus, vincevineus@wisc.edu, (608) 263-3274.

Who Earned a Certificate in Clinical and Community Outcomes Research?



"My research examines how culture and language influence health communication."

Maichou Lor, PhD
UW-Madison School of Nursing
Awarded the Certificate in 2014

► **Maichou’s research focus**

I aim to reduce health disparities by improving symptom management and quality of life for patients with communication challenges such as limited English proficiency. I study the impact of interpreters in healthcare settings, examine how culture and language influence health communication, develop and evaluate infographics to facilitate communication in healthcare settings, and improve recruitment methodologies for vulnerable populations.

► **Desired impact of her research**

My research is informed by the individuals and communities I work with. They identify the problems and I help find solutions. I hope to make a significant impact on the health of individuals and communities, including improving access to culturally and linguistically appropriate care.

► **Top things Maichou learned in the Certificate program**

Engaging community and end-users throughout the research process helps with project success, including development of interview questions, recruitment, data collection, and data analysis. I also learned that working in an interdisciplinary team enhances the quality of research.

► **Maichou’s advice for new certificate students**

Take advantage of your certificate project to expand your skills, learn from peers and mentors, and build partnerships with community stakeholders. Be an activist in research so that you can gain the skills necessary to make change happen!

► **Here’s one of Maichou’s recent studies in which she applied methods she learned in her certificate program**

Methods: Qualitative study with 67 Hmong participants. Semi-structured interviews on pain communication were audio-recorded, transcribed, and analyzed using directed content analysis.

Results: Participants described pain using stories that generally had the same dimensions of information that providers require for pain

assessment (e.g., references to time, causality, associated symptoms or related experiences, intensity, and consequences of pain.) However, participants expressed some pain dimensions in language that was not shared by providers: visual metaphors that generally referenced pain quality, and fewer words for pain location and intensity.

Participants used two strategies to decide to tell their pain story: assessing the provider and determining whether their story would be appreciated. The perception that providers underappreciated their stories resulted in dissatisfaction and under-treatment of pain. Ultimately, this resulted in less frequent contact with providers or changing providers.

Maichou's Certificate Curriculum		
Core Course		POP HLTH 709 Translational and Outcomes Research in Health and Health Care
Electives	Working wth Communities	NUR 702 Health promotion & disease prevention in diverse communities
	Qualitative	NUR 701 Interpretive Research in Health Care Settings
Seminar		POP HLTH 990-092 Access, Quality, and Outcomes Research Network Seminar
Project		Examining the Quality of Patient-Provider Communication Using Telephonic Interpreter service during Medication Encounters

Who Earned a Certificate in Clinical and Community Outcomes Research?



"My research looks into ways to overcome disparities in colorectal cancer screenings. We know that screenings save lives. So, why aren't screening rates higher?"

Jennifer Weiss, MD, MSPH

UW-Madison Department of Medicine, Division of Gastroenterology and Hepatology

Awarded the Certificate in 2014

Jennifer's Certificate Curriculum

Core Course		POP HLTH 709 Translational and Outcomes Research in Health and Health Care
Electives	Working with Communities	POP HLTH 703 Quality of Health Care: Evolution and Assurance
	Qualitative	NUR 701 Interpretive Research in Health Care Settings
Seminar		POP HLTH 990-092 Access, Quality, and Outcomes Research Network Seminar
Project		Primary care provider barriers to colon cancer screening

► Jennifer's research focus

My research is health services research. I try to identify the best practices for delivering colorectal cancer screenings in various, average-risk and high-risk populations. I am also now expanding my research to examine rural/urban disparities in colorectal cancer screening.

► Desired impact of her research

I hope to provide evidence about how health system interventions can be improved to increase colorectal cancer screening. I hope that, by increasing colorectal cancer screening rates in every community across Wisconsin, we decrease incidence and mortality from colorectal cancer.

► Top things Jennifer learned in the Certificate program

I learned how to conduct mixed-methods research and how to engage stakeholders. The Certificate program taught me how important it is to engage community stakeholders in research from the very beginning of the process, as well as the importance of putting in the time and effort to develop relationships with community partners and understand that this process cannot be rushed. I also learned very valuable research skills in qualitative methodology that have become integral in my current research projects.

► Jennifer's advice to new students considering enrolling in the Certificate program

Do it!!! I learned a lot! Adding this Certificate to my Masters in Population Health Sciences made me a much more well-rounded researcher and physician. The skills I learned are invaluable for conducting rigorous mixed methods research. Do not underestimate the importance of community and end-user engagement in successful research. And most importantly – have fun!

► In Jennifer's studies, she uses qualitative data to develop ways to improve interventions

We examined groups of primary care providers based on their perceptions of barriers to colorectal cancer screening and the relationship to their patient-level screening rates. This informed approaches for conducting barrier assessments prior to designing and implementing quality improvement interventions to increase colorectal cancer screening.

Most recently, I have conducted semi-structured interviews with patients, providers, clinic staff, and system administrators about their colorectal cancer screening interventions. The results of these interviews will be included in a toolkit to assist healthcare systems in their efforts to implement colorectal cancer screening programs.

Who Earned a Certificate in Clinical and Community Outcomes Research?



"The most important lessons I learned through the Certificate program was the importance of engaging with the community early and throughout my projects."

Tana Chongsuwat, MD, MPH
UW-Madison School of Medicine and Public Health, Department of Family Medicine and Community Health
Awarded the Certificate in 2022

► **Tana’s research focus**

Tana is committed to serving disadvantaged and underserved populations, particularly in global communities. Her research focuses on the evaluation and implementation of a cervical cancer prevention, screening, and early treatment program in low-resource settings.

► **Tana’s ISCHO certificate experiences and project**

Tana pursued the ISCHO certificate while working on her Master in Public Health degree at UW-Madison. Tana found helpful overlap between her MPH and certificate classes, and leveraged both to guide the development of her project. Her project engaged community members and community health workers to develop materials for cervical cancer prevention and screening. She and her community partner – the Milwaukee Consortium for Hmong Health – consulted community stakeholders to review and modify existing materials to develop resources sensitive to different learning modalities.

► **Tana’s thoughts on the certificate courses**

I learned how to The courses had a lot of time built into them to allow for project discussion. We spent time discussion our projects, different methods, and learning from each other.

► **How the certificate influenced Tana’s career**

One of the certificate’s influences on my research and career came through the use of qualitative methods in capturing community-level perspective. Quantitative data doesn’t always capture the impact of an intervention, especially with the communities with which I partner.

► **Tana’s advice to certificate students**

“Think about your research project early, then use the certificate classes to develop the project, to develop relationships, and to apply what you learn as the project develops.”

Tana’s Certificate Curriculum		
Core Course		POP HLTH 709 Translational and Outcomes Research in Health and Health Care
Electives	Working with Communities	PHS 780 Evidence-Based Decision-Making
	Qualitative	CURR 719 Introduction to Qualitative Research
Seminar		S&A PHM 703 Community Engagement in Health Services Research Social & Administrative Sciences
Project		Developing cervical cancer educational workshops for Hmong and Karenni women

Who Earned a Certificate in Clinical and Community Outcomes Research?



“The certificate was really important in helping me get the training I’ve always known I wanted.”

Kate Scheuer

UW-Madison Cellular & Molecular Biology program
Awarded the certificate in 2018

► What motivated Kate to pursue the certificate

Patient voice is very often missing in psychiatry and mental health. Because there are so few really solid guidelines, it’s especially important to listen to patient experiences and I think those get lost in psychiatric and mental health research.

► Kate’s favorite classes

I enjoyed the certificate classes! Grad school can be a bit of a grind, and intense at times. The certificate was a lot more self-directed; I appreciate that freedom.

It can look daunting to take more classes and work on a new project, but it’s worth it! There is so much flexibility in the certificate curriculum. There were many courses I wanted to take that weren’t on the Electives List, but I submitted a request and they were accepted. I was able to adapt the certificate to fit what I wanted to do.

Second semester statistics was the most helpful class I took in all of grad school, and I wouldn’t have taken it if it didn’t fit one of the certificate requirements.

► How the certificate program influenced Kate’s career

I’m very grateful that I found this program! It was the favorite part of my graduate career. It connected me to some really great people and communities and has helped drive both my passion and my career. My eventual career plan is to become a therapist researcher – it fits my passion of bringing patient voices into research. It’s always been my goal to blend those two things, but it’s not easy to get experience and training on how to do it. I don’t know of any place on campus besides ICTR where I could get this training.

► Kate’s certificate project

I scrapped data from the Depression sub-Reddit (r/depression), specifically data on how people handled side effects of antidepressants. I like playing with big data sets, and Reddit is a playground for that big data sets!

I looked at the kinds of questions people asked, what kind of support they asked for, what support they received, and how that reflected their responses. It was a different way to hear patient voices. I’ve done most of this work using Quantitative Ethnography, a method developed at UW-Madison that blends qualitative and quantitative methods.

Kate’s Certificate Curriculum

Core Course		POP HLTH 709 Translational and Outcomes Research in Health and Health Care
Electives	Working with Communities	SOC 617 Community Development
	Qualitative	COUN PSYCH 719 Introduction to Qualitative Research
Seminar		POP HLTH 990-092 AQORN (Access, Quality, and Outcomes Research Network) Seminar
Project		Communication about Antidepressants use on the Social Media Platform Reddit

Who Earned a Certificate in Clinical and Community Outcomes Research?



"In order to move from just defining health disparities in specific populations to closing them, you need to have the skills to work with community stakeholders that are already engaging with these populations on the ground. This program helped me develop those skills."

Meghan Brennan, MD, MS
UW-Madison School of Medicine and Public Health
Awarded the Certificate in 2019

► **Why Meghan chose to pursue the certificate**
I could quantify the healthcare gaps facial racial minority and rural patients, but I didn't understand why those gaps existed. I used the skills I learned through the certificate program to get a better idea of how to answer these questions by engaging folks who were out in the field.

► **Strengths of the certificate**
One of the strengths of the certificate is that it opens doors to a lot of cross-discipline and cross-career stage collaborations.

One of my classes, POP HLTH 703 (Quality of Health Care), gave me the opportunity to start working with engineers; that set me up well for a current ongoing collaboration.

► **Meghan's favorite classes**
Nursing 804 (Advanced Qualitative Design and Methods) was very useful. At the time, the end product of the course was a grant proposal, and I took advantage of that assignment to write a successful ICTR Pilot Award

On pursuing the certificate while working full-time It was hard, but I chose classes that had convenient schedules, such as meeting once a week for an extended period. That allowed me to block my schedule.

Meghan's Certificate Curriculum		
Core Course		POP HLTH 709 Translational and Outcomes Research in Health and Health Care
Electives	Working with Communities	POP HLTH 703 Quality of Health Care: Evaluation and Assurance
	Qualitative	NUR 804 Advanced Qualitative Design and Methods
Seminar		PHS 990 –092 AQORN (Access, Quality, and Outcomes Research Network) Seminar
Project		Life and Limb: Missed Cardiovascular Treatment Opportunities for Veterans with Diabetic Foot Ulcers